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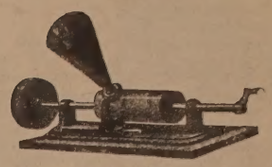
THE NEWSPAPER FOR
THE HOBBYIST OF VINTAGE
ELECTRONICS AND SOUND

THE HORN SPEAKER



PHONOGRAPH CENTENNIAL
1877 - 1977

Radio and the Copyright Problem

Radio News for May, 1925

By HIRAM L. JOME

Mr. Jome, of the economics and sociology department of Denison University, explains lucidly the present status of the fight between the broadcasters and music publishers.

The fight between the music publishers and the broadcasters is just another case of squeezing the public, helpless between them.

THE founders of our government saw that in order to have a strong development of American culture and science it was necessary to protect the property rights of authors and inventors. Therefore, they inserted in our Constitution the following section: "[Congress shall have power] To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

Several points must be noted concerning this provision. In the first place, copyright is not a natural right, like life and liberty. Though Congress has acted under this enabling clause with acts and amendments protecting the work of an author, still it may withdraw this protection at any time without doing violence to the Constitution. The section says "May."

In the second place, though this section is undoubtedly for the benefit of the individual, the public interest is paramount.

Under the United States Copyright Act, approved March, 1909, the author, dramatist, composer or other person entitled to such protection, is given, among other privileges, the exclusive right to print, reprint, publish, copy, vend and translate the copyrighted work, as well as the exclusive right to publicly perform for profit.

"PUBLICLY PERFORM"

The big issue arises as to the meaning of the exclusive right to publicly perform for profit. What is a public performance? What is a performance for profit?

"A performance is public," says Arthur W. Weil, in his "American Copyright Law," "when there is present a sufficient number of the public who would, presumptively, also go to a performance licensed by the author, as a commercial transaction, so that it may be said that, theoretically, at least, the author has sustained a monetary loss."

A large number of questions immediately suggest themselves: If I buy a phonograph record, on which a royalty of two cents has already been paid to the owner of the copyright, what rights have I? I may certainly play it on the victrola by myself. I may play it in the presence of members of my family; I may invite in a few neighbors and relatives to hear and enjoy the new selection. I may announce a housewarming and invite the entire community to my house and then play the record for the entertainment of my company.

Now, suppose I buy a hotel, restaurant or movie theatre. I play the victrola in the dining room of the hotel or auditorium of the theatre. I charge for the meals or for admission to the theatre. The music forms a part of the dinner. May I play this record without incurring further liability to the owner of the copyright? Exactly where does private performance end and public performance begin? When does a performance become one for profit?

Suppose now I played this new record into the microphone of the transmitting apparatus of a broadcast station, which sends the music out upon the waves to an unseen audience of thousands scattered over a wide territory. Is this a public performance? Is it a public performance for profit?

If the reader will visualize these situations, he will understand the crux of the copyright problem.

The Federal Courts have for some time been grappling with these questions. The Shanley Company conducted a public restaurant in New York City. Songs were sung and music was played for the entertainment of the patrons. The diners, of course, paid for their meals, but there was no direct charge for the musical entertainment. The song, "Sweethearts," was sung in this place. The owner of the copyright asked for an injunction restraining the proprietor from having this song rendered, claiming that his property rights were being invaded. In the lower Federal Courts the author failed to get relief on the ground that, since no admission was charged, there was no public performance of "Sweethearts" for profit.

The author appealed the case, however, and it finally reached the Supreme Court for final decision. This Court, speaking through Justice Holmes, said in part: "If the rights under the copyright were infringed only by a performance where money is taken at the door they are very imperfectly protected. Performances not differ ent in kind from those of the defendant (the restaurant owner) could be given that might compete with and even destroy the success of the monopoly that the law intends the plaintiff to have. It is enough to say that there is no need to construe the statute so narrowly. The defendant's performances are not for charitable purposes. They are part of a total for which the public pays, and the fact that the price of the whole is attributed to a particular item which those present are expected to order, is not important. It is true that the music is not the sole object, but neither is the food, which probably could be got cheaper elsewhere. The object is a repast in surroundings that to people having limited powers of conversation or disliking the rival noise give a luxurious pleasure not to be had from eating a silent meal. If music did not pay, it would be given up. If it pays, it pays out of the public's pocket. Whether it pays or not, the purpose of employing it is profit, and that is enough." And he therewith reversed the decision of the lower Court.

A certain theatre owner employed a pianist to play appropriate music at his movie performances. The pianist was given discretion as to what selections he should perform. The pianist played "Tulip Time" from "Ziegfeld's Follies 1919." No charge was made for the music, but a charge, of course, was made for admission to the theatre. The owner of the copyright sought an injunction restraining the theatre owner from playing this selection. The Federal District Court granted the injunction, holding that the playing of copyrighted music by a pianist in a picture theatre was an infringement of the copyright.

COPYRIGHTS AND BROADCASTING

With the advent of radio broadcasting it became necessary for these stations to furnish music for the musicians to send out upon the air. It would conceivably be possible to make up a good popular program from the free list (on which copyright

(*Continued on page 2166*)

has expired, but audiences demand up-to-date music as well as the popular songs of the past. So it is practically necessary for artists performing at broadcast stations to resort to newly copyrighted music. But, here comes the difficulty. If I buy printed sheet music, the possession of the tangible property does not vest in me ownership or control of the thought and creation of the author for any other than my own and others private enjoyment. May I legally sing that selection, which I have learned from the sheet, into the radio apparatus for the enjoyment of an unknown and unseen audience?

The opinions of the Federal Courts are conflicting. In 1923 it was held that broadcasting from a department store was a performance for profit. L. Bamberger & Co. conduct a department store in Newark, N. J. It also has instituted a radio department, selling radio equipment of all sorts. This company also conducts a broadcast station (WOR) from which vocal and instrumental concerts and other entertainment and information are broadcast. The station performed "Mother Machree" and the owner of the copyright claimed the copyright was infringed upon, and sued for relief. The District Court granted the injunction. Judge Lynch held that this was a public performance for profit for the following reasons:

1. The defendant charged the cost of the broadcast station against the general expenses of the business. 2. While the Bamberger Company does not broadcast the sale price of its wares, it does broadcast a slogan, "L. Bamberger & Co., one of America's greatest stores, Newark, N. J.," at the beginning and end of each program. 3. If the purpose had been eleemosynary, for charitable purposes, and not for profit, it is likely that it would have adopted some anonymous name or initial.

PUBLIC PERFORMANCE?

Other Federal Courts have held that the act of broadcasting is not a public performance. In the fall of 1923 the American Automobile Accessories Company, of Cincinnati, a manufacturer of radio receiving sets and parts, caused the rendition of "Dreamy Melody" by means of singing and an orchestra to be broadcast from its station in that city. The owner of the copyright, arguing that this was a public performance for profit under the Act of 1909, petitioned for an injunction restraining the Automotive Accessories Company from further rendering this composition by radio.

The Federal District Court, speaking through Judge Hickenlooper, dismissed the case on the ground that this was no public performance for profit. The argument of the Court may be briefly summarized:

1. A strict construction of the statute is necessary. The law must be read according to the natural import of the words used. Radio broadcasting was not within the mind of Congress when using the term "perform publicly for profit."

2. In order to be a public performance in the sense in which Congress intended the words, there must be an assemblage of persons. "We simply feel that the rendition of a copyrighted piece of music in the studio of a broadcast station, where the public are not admitted and cannot come, but where the sound waves are converted into radio frequency waves and thus transmitted over thousands of miles of space, to be at last reconverted into sound waves in the homes

of the owners of receiving sets, is no more a public performance in the studio, within the intent of Congress, than the perforated music roll which enables the reproduction of copyrighted music, by one without musical education, is a copy of such music. A private performance for profit is not within the meaning of the Act, nor is a public performance without profit. All contemplate an audience which may hear the rendition itself through the transmission of sound waves, and not merely a reproduction of the sound by means of mechanical device and electromagnetic waves in ether. The auditor 'listening in' at Indianapolis, Cleveland or Chicago would be surprised to learn that he had, that evening, attended a public performance in Cincinnati."

The third important decision to be noted is that of Remick vs. General Electric Company. The General Electric broadcast station (WGY) at Schenectady, N. Y., had broadcast the song "Somebody's Wrong," the copyright of which belongs to the Jerome H. Remick Company. The plaintiff petitioned the United States District Court of the Southern District of New York to enjoin the General Electric Company from further rendering this song by radio.

The Court, speaking through Judge Knox, refused to grant the petition on the grounds that the infringement of the copyright, if any, is committed by the performer and not by the owner of the broadcast station; the performer, if entitled by license to use the copyrighted music in any way, may extend his audience without incurring any further liability."

So far as the practical results are concerned, the broadcaster of the authorized performance of a copyrighted musical selection does little more than the mechanic who rigs an amplifier or loud speaker in a large auditorium to the end that persons in remote sections of the hall may hear what transpires on its stage. Such broadcasting merely gives the performer a larger audience and is not to be regarded as a separate and distinct performance of the copyrighted composition on the part of the broadcaster."

A CONFLICT

Thus it is apparent that the Federal District Courts are in conflict. It is generally admitted that most of the broadcasting performances are for profit—not for a direct gain, it is true, but for indirect profit, such as building up goodwill and maintaining the sale of receiving sets and parts. The owner of a broadcast station hopes, no matter what his business, to keep his name constantly before the public. The big problem is this: Is a broadcast performance a *public performance*, as intended by the framers of our Copyright Act?

The final adjudication of this question lies with the Supreme Court of the United States. The Copyright Law of 1909 is very general. It merely says "publicly perform for profit," without mentioning any specific type of performance. Congress evidently saw that a public performance of the future might not be the same as a performance in 1909, so it couched the statute in general terms. "It is a general rule," says Sutherland, in his book on Statutory Construction, section 589, "that courts must find the intent of the Legislature in the statute itself. Unless some ground can be found in the statute for restraining or enlarging the meaning of its general words they must receive a general construction; the courts cannot arbitrarily subtract from or add thereto."

Congress has power to regulate interstate commerce. The founders of our government probably never dreamed of the railroad, the telephone and telegraph, and the airplane, yet one by one these instrumentalities have been, and are being, subjected to Federal regulation under the Commerce Clause.

The settlement of the copyright problem is an important matter of public policy. The problem is legislative rather than judicial. It is up to Congress to determine the rights of the owner of the copyright. The Courts interpret the law as it is, but Congress may change a statute so as to include broadcasting, if the courts say it is not included, or so as to exempt broadcasting, if the Supreme Court should decide that it is covered by the present law.

In order to settle this question, Senator C. C. Dill, of Washington, introduced into the last Congress bill No. S2600, which was intended to amend the copyright law by exempting the radio and the telephone from the operation of its provisions. The important change in the law comes near the end of section I:

"And provided further, That the copyright control shall not extend to public performances, whether for profit or without profit, of musical compositions where such performance is made from printed or written sheets or by reproducing devices issued under the authority of the owner of the copyright, or by the use of the radio or telephone, or both."

Let us examine the effects of this bill. If it should be enacted I would have the right to purchase sheet music or a phonograph record and have it played in the public dining room, or in the auditorium of a theatre, or in a broadcast station without extra charge. The theory of the amendment is this: When I buy a sheet of music or the device for mechanical reproduction, I include in my purchase price an amount sufficient to pay the royalty accruing to the author or composer. He has already, then, received one fee, which is all the law ought to grant. It was never the intention of Congress that the composer should have the double right of selling his product to the public and then following it up and requiring further payment every time it is played in public. This is the theory and purport of the bill.

THE BILL'S ARGUMENT

The arguments for this bill may be briefly summarized as follows:

In the first place it will free radio broadcasting. On account of the great expense, the lack of direct income, and the instability of this new public utility, the proprietors of these stations cannot afford to pay royalties.

In the second place, it is unjust to permit the owner of a copyright to collect two fees for the same service. The owner of the copyright has already gotten his just desert from the royalty included in the price of the record or sheet of music.

Broadcasting a new piece of music tends to advertise it and to stimulate its sales. Since the owner of the copyright suffers no loss, and probably gains by the act of broadcasting, he should receive no extra compensation.

If the owners of copyrights are allowed to make this extra charge the effect will be cumulative. For example, how about the bootblack who places a radio receiving set in his shoe shining parlor for the enjoyment of his customers? Here, again, would be another public performance for profit. Surely, the advocates of the Dill bill say, the 1909 law cannot be intended to have such far-reaching effects.

But, the opponents of the Dill bill argue, whether broadcasting helps or retards the sale of music is really beside the question. As Judge Lynch said in the Bamberger case:

"Our own opinion of the possibilities of advertising by radio leads us to the belief that the broadcasting of a newly copyrighted musical composition would greatly enhance the sales of the printed sheet. But the copyright owners and music publishers themselves are perhaps the best judges of the methods of popularizing musical selections. There may be various methods of bringing them to the attention of music lovers. It may be that one type of song is treated differently than a song of another type. But, be that as it may—the method, we think, is the privilege of the owner, he has the exclusive right to publish and vend, as well as to perform."

The owner's rights of copyright should be strengthened rather than weakened. Art, music and culture can be encouraged under our present state of society, by making special inducements to the authors. The private property rights in copyright should be maintained on a sound basis.

Against the passage of this bill the opponents argue:

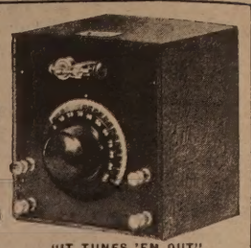
Broadcasting should be placed on a sound economic basis so that royalties can be paid. Our big problem at the present time is the determination of who shall pay and how. If some adequate way of compensation were devised so that there would be a proper balance between the broadcaster's income and expenditure, the broadcast stations could afford to pay royalties to the owners of the copyrights.

This is not a case of two fees for the same service, but of two fees for two different services. If I buy a sheet of music, the opponents maintain, and have it played at a private entertainment for my friends or relatives or at a public non-profit performance, I have paid one royalty charge. In return for that I acquire the privilege of reading the physical notes from the physical paper and transforming them into things spiritual and mental. If I had not bought this sheet, this transformation could not have taken place. This is service number one.

Now, if I render that selection before the microphone of a broadcast station, the expenses of which I charge up to my general business costs, I am enabling many other people to hear it who otherwise would not have had the opportunity, unless they had purchased the sheet. This is service number two, for which an extra payment is legitimate.

As to the question whether broadcasting helps or hinders the sale of sheet music or victrola records, it must be admitted that it is difficult to decide. The evidence is strong that the recent McCormack-Bori broadcast concert has stimulated the sale of Victor records. A considerable number of music publishers state that they have received orders for sheet music, which can only be explained by the fact that the purchasers have had their interest aroused by hearing these songs on the radio. Some of the theatre owners and music publishers apparently forget that the advent of radio will multiply popular interest in music, and that in the future there will undoubtedly be room for both.

X-L Three Way Radio



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As a crystal receiver the X-L THREE WAY is unexcelled for selectivity, volume and simplicity of control.
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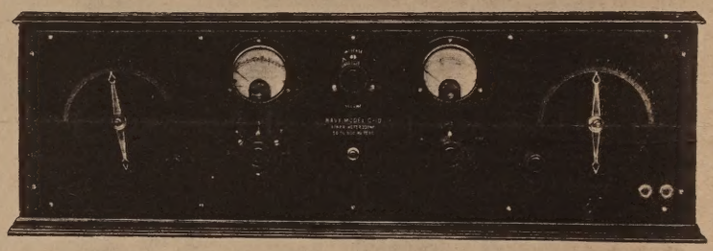
C-10 SUPER-HETERODYNE



Only 2 Main Tuning Adjustments for 10 Tubes
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A POWERFUL 10 TUBE BROADCAST RECEIVER

having a range and degree of selectivity far in advance of any receiver.

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Please forward literature on the New Navy Model C-10. No charge.

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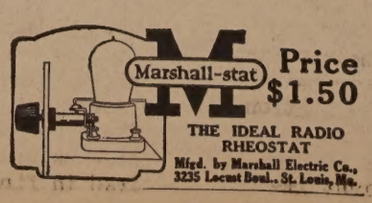
Address.....City.....State.....



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Price $1.50
THE IDEAL RADIO RHEOSTAT
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PERFECT REPRODUCER
Tone loud and pleasing. Handsome material and design.
Black—$22.50 Shell—$25.00
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LETTERS

Dear Jim:

Sorry about not sending in that subscription to THE HORN SPEAKER but for the last several months, the paper has arrived in a tattered rag condition and since there is material in it that I would like to save, I have been wondering if it would not be best to have a complete volume porperly wrapped and sent to me at one time. Since everything but the ads in the classified section is past history, the delay would not matter. I do not know if this is typical of today's mail but I receive so much today that looks as though the entire P.O. Branch has thumbed through my mags, stepped on them and did everything else they could think of to batter them and then decide to let me have them. One small catalog was completely torn in two and stapled back together. What do you think?

Sincerely,
H. Custer
30635 Helmandale Dr.
Franklin MI 48025

EDITOR....Anyone else having this problem?

Dear Jim:

I had an experience recently which I would like to share with your readers. I was recovering at home from a serious operation, when my wife suggested that we check out a local garage sale that advertised old radios. Having gone to so many of them and having come up empty handed made me somewhat less than enthusiastic. When we arrived to see a pile of electric "all american five" 1940's & 50's wood and plastic sets, I felt that my attitude was justified.

My persistant wife, however, was busy digging through the mess to uncover a Freshman and an AK 20. My mood began to change.

Down at the very bottom of a pile, she spotted a set with many dials and tap switches.

Now this was the moment that every collector dreams about, for there before my bulging eyes and pounding heart was a 1915 Marconi model 106! A glance at the nameplate told me that it was the original (not the RCA 1922 modified version) with the date of manufacture April 1915, Serial #27.

Now there were no price tags on anything, and I was asked. "What are they worth?" I admitted that the one set was a gem and I immediately offered a handsome price. The seller, at this point admitted that I was the first to make an offer and since he knew nothing of their value, he would have to keep them, receive counter offers, and possibly auction everything off instead.

We gave an offer for the entire collection and left. My first impression was that either I had been used to obtain a "free estimate", or that he became alarmed that a pile of worthless junk was suddenly so valuable.

Should I have been so honest with him about prices? It's hard to say. After a week of tension rivaling "expectant father syndrome", we received a call from the seller who stated that he had another offer of $100 more and, since we were first, if we matched that price the collection was ours. We got it.

Upon receipt of our money he admitted that there was no other offer.

I don't know if there is a moral to this story, but I will say this:

I wish a similar great find to all my fellow collectors; but for your sake, I hope you also find a price tag already on the item!

Sincerely,
Robert J. Corum
125 Locust Avenue
Wallington N.J. 07057

EDITOR...Thank you for sharing your experiences.

Jim:

Enclosed is a check for another year's renewal.

Does anyone have any info on a 1928 Scott Selectone? It has four tubes (outside of the screen grid unit), four or five plug in transformer cans, two tuning caps and a filament battery meter. Haven't found very much about it in the books; would appreciate some help from the Scottophiles out there. Thanks.

Sincerely,
Anthony Matt
33 Island Trail
Sparta N.J. 07871

EDITOR....There are plenty of Scottophiles out there.

Dear Jim:

I received the enclosed letter from Betty Cozine, but could not give her any help so told her I was forwarding her letter to you. Hope you know someone that can do her some good.

Sorry I missed you on my last trip through Dallas.

You are still doing an excellent job on THE HORN SPEAKER. In fact after reading about the "Cylinder" Edison Phonographs I became interested enough in them to purchase a few.

Sincerely,
Ed. Lindsay
21 Hillcrest
Ponca City OK 74601

Mr. Lindsay:

I have an old acoustic phonograph which seems to be in working order except for the piece pictured. There doesn't seem to be anyone in Atlanta who can provide a part or a lead in finding what is needed.

Your name was given to me as a possible source of information. I would appreciate any help you can provide. The piece has sentimental value. It belonged to my husband's parents.

Brunswick - Panatrope
8 - 7
192014

Truly,
B. W. Cozine
5545 Rainbow Ridge Way
Decatur GA 30034

Dear Sir:

Enclosed is my cheque for $5.50, covering a year subscription for THE HORN SPEAKER.

I would also like to know where I can get a blank disk for a Silvertone Radionet Radio, Model 7068, record player which has recording facilities.

Thank you,
S Volpini
335 Armadale Ave
Toronto, Ont.
Canada M6S 3X5

EDITOR...Someone help us.

Dear Jim:

Inclosed is a check for a year's subscription to THE HORN SPEAKER.

I was wondering if you could run an article on restoring steel based dials. I have an Aeriola Sr. made by Westinghouse but the dial is rusted. The numbers are still legible but the rust has partly obliterated the name.

Sincerely yours,
Richard Ray
423 Orchard
Cannon City CO 81212

EDITOR...We'd like to receive an article from one of our advanced collector-readers.

Dear Jim:

I particularly enjoyed the November issue of THE HORN SPEAKER because of the very nice full page ads for Federal & Radiola. As you know Federal's were made near here in the Buffalo area.

Your first letter was regarding

(Continued on page 6)

Radio News for January, 1931 595

Up and Coming!

The Midget Receiver

Diamonds are not necessarily shipped in box cars, nor does a radio set have to be housed in a large cabinet to be a thoroughly good receiver. While midget receivers will never replace the console receiver as the major radio installation in the home, they find vast usefulness as an auxiliary installation in numbers of ways. Not only this, but with the mantel set the man who cannot afford a hundred or more dollars for a pretentious receiver can still have a modern receiver of modest size, with proportionate cost

By Ralph L. Power

Paterson Radio Corp.

Flint Radio Co., Inc.

Premier Elec. Co.

MIDGET golf, midget motor cars and midget radio sets. And this doesn't necessarily mean that people are satisfied with small-sized editions of the real thing, either.

What it does mean, though, is that midget or pee-wee golf takes the place of a full grown course for those who cannot get away from the city to the country club, and it serves as a practice area for those who want to perfect certain parts of the game.

The midget or baby motor car seems to have a field as a second family car, especially valuable in city traffic.

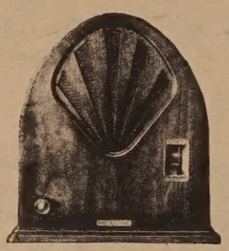
The midget or mantel radio receiver does not at all mean merely that it is a low-priced commodity or one which competes with the more fully grown receivers.

But the mantel type set has been largely instrumental in bringing in the two-set home and providing radio entertainment, too, for those who cannot afford the higher-priced outfits.

The smaller, more compact sets have proved their worth as a portable to take away on vacation jaunts, as a set for the guest chamber, one for the nursery, servants' quarters and even in the family garden.

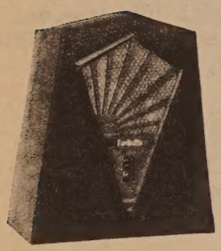
Starting towards the close of 1929 in Los Angeles, in an attempt to keep factories going during a depression, the

(Continued next month)



Powel Mfg. Co.

The Sterling Mfg. Co.



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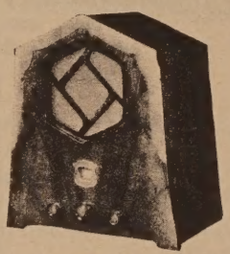

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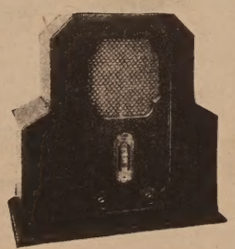
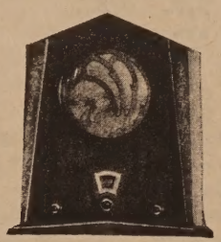


Pilot Radio & Tube Corp.



Jackson Bell Company

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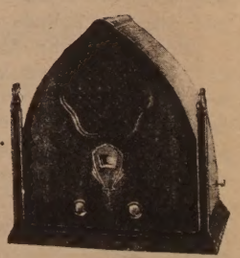
Jesse French & Sons Piano Co.

Advance Elec. Co.



Pierce Airo, Inc.

Simplex Radio Co.

Cardinal Radio Mfg. Co.

U. S. Radio & Television Corp.

Automatic Radio Mfg. Co.

THE RADIO PLAYBILL: THIS WEEK—"OUR GAL SUNDAY"

PACKED chock-full of adventure action, "Our Gal Sunday" is the old ten-twent'-thirt' melodrama stepped up with modern romantic and dramatic incidents that leave listeners breathless with suspense at the end of each episode, as the principals in the piece leap from one fabulous situation to another. It opens in the western mining country of the United States, eventually jumps to a palatial and dignified estate in Merry England, and then back to a dude ranch in Colorado, near where the story began. It was adapted from Thomas Raceward's play, "Sunday," the show in which Ethel Barrymore delivered her famous line, "That's all there is, there isn't any more." The radio sketches, written by John De Witt, depict the adventures of a young orphan girl and her two old guardians, "Lively" and "Jackie," who devote themselves with tremendous zeal to looking out for her welfare. "Our Gal Sunday" is a Monday-through-Friday broadcast, on the air at 12:45 p.m. EST, 11:45 a.m. CST, 10:45 a.m. MST, 9:45 a.m. PST over CBS.

DOROTHY LOWELL plays "Sunday," the twenty-one-year-old girl who was abandoned as a tiny baby by her father and left on the doorstep of "Lively" and "Jackie," two prospectors, who reared her in a Colorado mountain cabin. Brought up in a man's world, "Sunday" knows nothing of life on the outside. When a young English playboy courts her and asks her to run away with him without benefit of clergy, "Jackie" becomes outraged and shoots the varmint down like a dog. Fortunately his wounds prove to be superficial and "Jackie" escapes legal punishment. When another Englishman, Lord Henry Brinthrope, arrives in Silver Creek, "Sunday" falls in love with him. He proposes marriage and "Sunday" accepts him, but her peculiar bringing-up raises family barriers and "Sunday" hesitates to leave "Lively" and "Jackie." Consequently, the wedding is postponed for some time. When she is finally transplanted from Colorado to Lord Brinthrope's mansion in England, where the wedding takes place, "Jackie" and "Lively" go with her; for the two hard-boiled old miners can't bear the thought of being separated from their "gal." They feel that they must still guide her destiny in a country which is strange to all three of them, at least until she is safely married, and afterward if necessary

a Larkin radio. It was also made in Buffalo & I have written the writer, Mr. Fowler, about it.

Jim, I am vice president (and photographer) of our local club. The Niagara Frontier Wireless Association. As such I liked your full page description of our last meet very very much.

Would you please send me a few extra copies of the page? It is page 6, Nov. 77 issue. I would like to give one to the museum director when we hold our meets and a few others.

Thank you,
Larry Babcock,
8095 Centre Lane
E. Amherst N.Y. 14051

EDITOR...Always glad to help the clubs.

DISCOGRAPHIES OF CLASSICAL MUSIC LISTED IN NEW BOWKER BIBLIOGRAPHY

In the one hundred years since the invention of the phonograph, sound recordings have proliferated throughout the world. Listings of these recordings -- discographies -- have formed important segments of journal articles, monographs, books, and other studies of a given composer or musical artist. In fitting tribute to the one-hundredth anniversary of the phonograph, R. R. Bowker published on December 7, 1977 the first in a five-volume series, BIBLIOGRAPHY OF DISCOGRAPHIES. Complied by Michael H. Gray and Gerand D. Gibson, Volume 1 covers discographies of classical music found in duplications from 1925 through 1975.

Over 3,000 discographies are listed in BIBLIOGRAPHY OF DISCOGRAPHIES, gleaned from both American and European (including Russian) publications. Entries span such musical artists as Enrico Caruso, Pablo Casals, and Maria Callas; discographies on composers as diverse as Fryderyk Chopin and John Cage are included. Additionally, discographies are included under such specific categories as Church Music, Clarinet Music, Harp Music, etc. Entry information includes name of complier or author, title of article, name of journal or other source, date of article and page numbers. Indication is then given as to whether the discography contains the following data: non-commercial recordings; matrix numbers; index; release dates; take numbers; place and/or date of recording. An index is provided, encompassing elements from the main citations: compilers, authors, editors, series titles, and distinctive discography titles.

Other bibliographies of discographies planned for the five-volume series will survey jazz, popular music, ethnic and folk music, and general discographies of music, as well as label lists, speech, and animal sounds.

Michael H. Gray is Music Librarian at the Voice of America and Gerald D. Gibson is Assistant Head of the Recorded Sound Section at the Library of Congress. They are, respectively, Editor of the Journal and President of the Association for Recorded Sound Collections.
Write: R.R. Bowker Company,
1180 Avenue of the Americas
New York, N.Y. 10036

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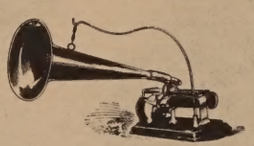
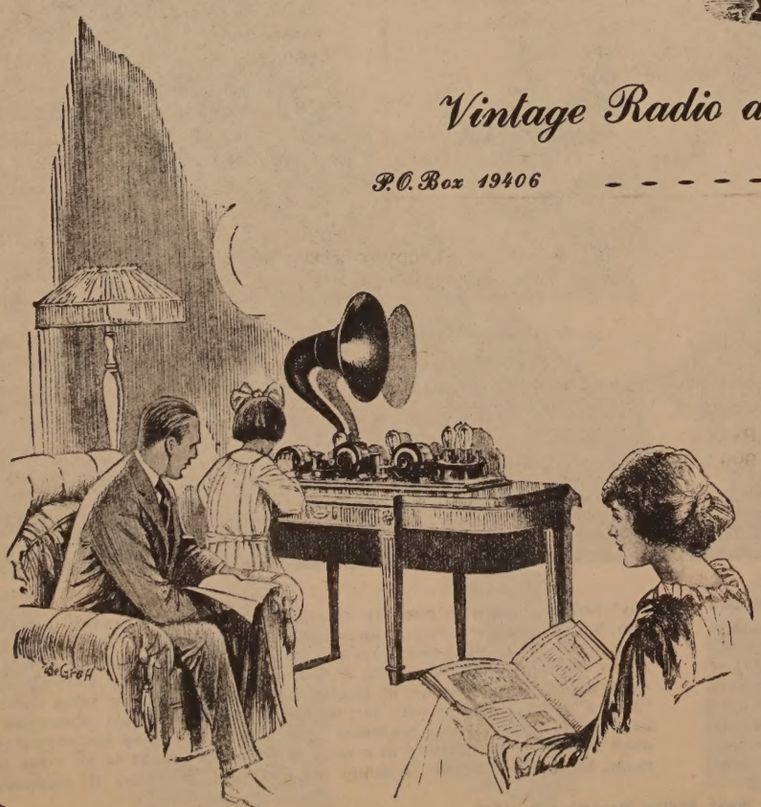


Vintage Radio and Phonograph Society

P.O. Box 19406 — — — — — — — — — — — *Dallas, Texas 75219*



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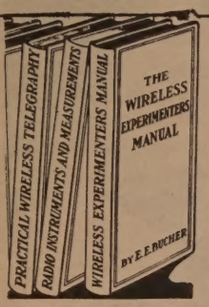

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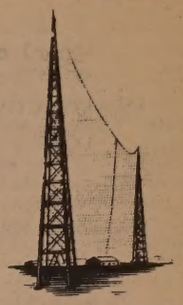
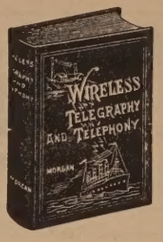


Wireless Telegraphy and Telephony Simply Explained

By ALFRED P. MORGAN

154 Pages (5x7½) 156 Illustrations

THIS is undoubtedly one of the most comprehensive treatises on the subject, and a close study of its pages will enable one to master all the details of the wireless transmission of messages. The author has filled a long-felt want and has succeeded in furnishing a lucid, comprehensive explanation in simple language of the theory and practice of wireless telegraphy and telephony.



This book treats the subject from on entirely new standpoint. It is well illustrated by over one hundred and fifty interesting photographs and drawings. All diagrams have been made in perspective showing the instruments as they actually appear in practice. The drawings are carefully keyed and labelled. Many of the photographs are accompanied by phantom drawings which reveal the name and purpose of each part.

A book the wireless experimenter cannot afford to be without. It enables one to design and construct apparatus. Also valuable to the layman.

AMONG THE CONTENTS ARE:

Introduction. The Means for Radiating and Intercepting Electric Waves. Aerial Systems. Earth Connection. The Transmitting Apparatus. The Receiving Apparatus. Tuning and Coupling. Directive Wave Telegraphy. Wireless in Army and Navy. Wireless on Aeroplane. How a Message is Sent and Received, The Telephone Transmitter and Receiver. The Thermophone. The Selenium Cell. The Wireless Telephone. The Difficulties of Wireless Telephony. A Simple Wireless Telephone. The Effects of Speech Upon Wireless Telephone Apparatus. The Requirements of Wireless Telephone Apparatus. The Production of Undamped Electrical Oscillations. The Paulsen Arc. Wireless Telephone Apparatus. The Majorana Transmitter. The Receiving Apparatus. The Audion. Transmission of Wireless Telephone Messages. Maxwell's Theory. Hertz's Discovery, etc.

WHAT IS SAID OF THIS BOOK:

A simply-worded book, which can be heartily recommended.
-Scientific American.

$14.00 each

1-78 Gernsback, "THE WIRELESS TELEPHONE", 1911, 57 Illustrations, Complete, no torn or clipped pages, Paper covers, 73 pages plus 7 pages of catalog, appx. 5 x 7", ...$25.00

2-78 Gernsback, "HOW TO MAKE WIRELESS INSTRUMENTS", 1912 by 20 Wireless Experts, 25 different instruments, 75 illustrations Gernsback publication, appx. 5 x 7 93 pages, paper back, excellent condition,.....$25.00

3-78 Manhattan Electrical Supply Co, "MANUAL OF WIRELESS TELEGRAPHY", 1913, 95 pages, paper covers, page of wireless theory, Aerials, the Transmitting Station, Detector, etc., and everything you ever wanted in illustrations of Wireless gear plus, lighting, Telegraph, and you name it, Excellent condition.....$25.00

4-78 RCA, "WORLD WIDE WIRELESS" August, 1925, Employees publication with many items relative to RCA (articles). water stain on cover, 57 pages, paper covers, $10.00.

5-78 RCA, "RADIOLAS, RADIOTRONS, AND ACCESSORIES", 20 page paper back catalog of RCA 1925 product line including #30 console, Radiola Super VIII, #28, #26, #25, Radiola Super-Heterodyne, #20, Radiola III and IIIa Amplifier,#104 speaker, etc., Tubes, pencil marks on cover, 5 x 7", paper covers, some stain on pages,.....$12.00

6-78 "RADIOTELEFONIA TELEGRAFIA ELECTRICIDAD" Catalog from "Galli Honos" in Buenos Aires. 1911 Radio Catalog with many, many illustrations, 5 x 7", 160 p., printed in Spanish (I guess), front and back cover gone, $10.00

7-78 Clapp-Eastham Co., "RADIO TELEGRAPH ELECTRICAL AND LABORATORY APPARATUS", 1920, Boston Key, Meters, Loose Coupler, Parts, Receiver (F.A.R.), 32 p., paper back, excellent, $15.00

8-78 Simplex Radio Supply Co., St.Louis, 1926, 4 x 9 94 pages, some pages stuck together, coffee stains, cover in pretty good shape, paper, $6.00

9-78 Manhattan Electrical Supply Co, "MANUAL of WIRELESS TELEGRAPHY and Catalog of RADIO TELEGRAPH APPARATUS", 1916, 180 p., The Wireless collector will love this, schematics, De Forest, like Type RJ6, RJ7, and others, illustrations are terrific, front and back cover gone, but the balance is excellent, 6 x 9"....$20.00

10-78 Marconi Wireless Tele. Co, "INSTRUCTIONS for MARCONI OPERATORS", 1913, 39 pages, 7 x 10, slight water mark on back, $15.00

11-78 The Barawik Co, Chicago, Catalog, 1929, Sets- parts, Accessories, Wholesale Price Guide, 259 pages in excellent condition, lots of consoles, parts $15.00

12-78 ALLIED RADIO CORPORATION Catalog, 1929, Beautiful front and back cover (four color) and in excellent condition! 160 pages.....$30.00

13-78 ALLIED RADIO CORP, 1930 Catalog, beautiful like the 1929 issue, a few more pages, has the "new"Screen Grid models. You can have them both for $50.00 $30.00 for this 1930 issue.

14-78 Montgomery Ward & Co., 1922, "RADIO WIRELESS TELEPHONE, TELEGRAPH EQUIPMENT", 52 pages, excellent condition although catalog was folded lenghways, RCA RADA, Acme, Tuska two color front cover with the family listening to a RADA (Grand Pa is there too).....$30.00

15-78 Federated Purchaser, Inc., "RADIO BARGAIN NEWS" Number 15, Oct.-Nov. 1932, Dealer's & Service men's Buying guide, catalog, 106 pages, extra good, $10.00.

16-78 CUNNINGHAM TUBE MANUAL, 1927, 9 x 12", 84 p., Symbols, Design, quality, life, Theory, Measurements, Performance, Power, Testing, Circuit diagrams, well printed and illustrated. $30.00

17-78 RCA, "RADIO APPARATUS For Amateur and Experimental Use with Instructions for Continuous Wave Operation", 54 pages, Nov.1, 1921, includes Radiotron Transmission, A Scientifically Constructed Station, Info to the Amateur, Transmitting Tube Circuits, and the use of transmitting tubes. All of this PLUS the Catalog section. Some writing on front cover, but balance of book in excellent condition. $40.00

July, 1931

Small Sets

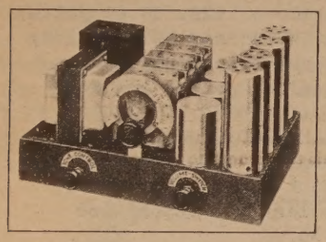
AN ATTRACTIVE MIDGET

THE "Vitatone" Midget radio set features a "full-vision" type tuning scale, graduated from 0 to 100. A 3-amp. automotive-type fuse is the protective device in the power input circuit; this fuse clips into one of two positions, thus adjusting the input connections for high or low line voltage.

Three type '24 tubes are used in the R.F. circuit; their amplified output is fed into a type '27 power detector, the output of which feeds a type '45 power tube. In the plate circuit of the last is connected, from plate to chassis, the tone control, consisting of a 10,000-ohm variable resistor in series with an 0.5-mf. fixed condenser. An '80 completes the tube kit.

Volume is controlled by the simple process of shunting a 1,000-ohm variable resistor across the first R.F. transformer's primary. The volume control in this receiver is combined with the off-on switch. The dynamic reproducer used in the "Vitatone" receiver has a 2,500-ohm field; which connects in the "B+" power lead as one of the two filter chokes.

The instruction sheet which this manufacturer furnishes to the set owner contains a piece of advice which, though not profound, is at least uncommon in this form. It reads: "In all cases, do not attempt to repair the set yourself. Call a competent Service Man; otherwise your guarantee will be nullified and void." It is accompanied by the circuit diagram and operating voltages. (*Zaney-Gill Corp., Chicago, Ill.*)



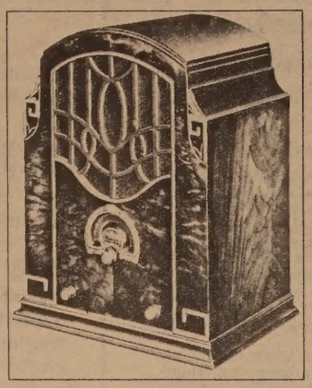
Chassis of the "Model 54" Vitatone.

NEW SUPERHETERODYNES

FOUR superheterodyne receivers have been introduced under the Clarion banner: "Model 80" 7-tube, mantel-type; "Model 81" 7-tube console; "Model 90" 8-tube mantel-type; and "Model 91" 8-tube console. Their two outstanding circuit differences are described below; at the same time, attention is called to a Data Sheet, covering the Clarion "90" series, in this issue.

Six tubes are used in the fundamental "80" series superheterodyne circuit. "Variable-mu" and "pentode"—the latest words in tubes—are found in both the "Model 80" and the "81" receivers; three of the former, of '51 type, being used as first R.F., first detector, and first I.F., positions, and the latter as a power output tube. A screen-grid type '24 is used as the second detector; and a type '27 functions as the oscillator. The rectifier is an '80.

A switch-operated tone control connects a .02-mf. fixed condenser across the primary of the output audio transformer. Volume is controlled by varying the potential on the cathodes of the two '51's used as amplifiers; the circuit includes, between cathodes and chassis, a 10,500-ohm variable resistor and a 230-ohm fixed resistor. The detector is resistance-capacity coupled to the pentode. The reproducer's field coil is connected in the "B—" lead.



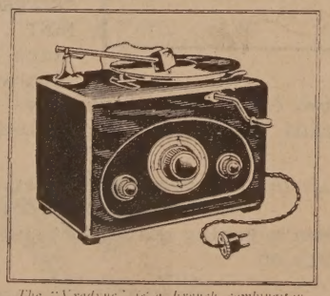
Exterior of the "Model 90" Clarion.

Automatic volume control, added to the circuit used in the "80" Series Clarion receivers (and the circuit modified accordingly) produces substantially the connections that constitute the "90" Series Clarion receivers; as shown in the Data Sheet (No. 46) previously referred to. The automatic-volume-control tube is a screen-grid '24. The tone control in this model is smoothly adjustable.

(*Transformer Corporation of America, Chicago, Ill.*)

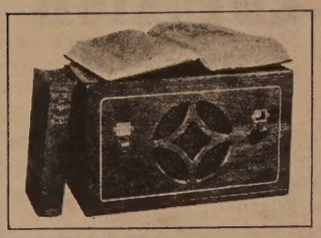
A RADIO PHONOGRAPH

IN the combination illustrated here, a French manufacturer has found what is very nearly ultimate simplicity. The receiver is of the regenerative type still very common in Europe, with two stages of audio following; the latter are used with the phonograph pickup. While the arrangement is not especially attractive, compared with the elaborate consoles used here, it is quite inexpensive. An external loud speaker is required.



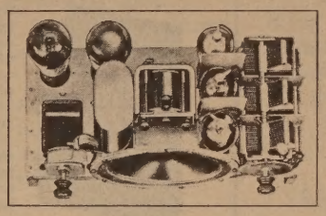
The "Vradyne" is a French combination

A "PERSONAL" RECEIVER



The American Bosch "Model 54" receiver.

IN the receiver shown here, which must be called an infra-midget, or by some similar superlative, the idea of lightness and portability is carried further than ever before in an electric set of loud-speaker output. It may be tucked under the arm and carried to any desired location without difficulty; yet, small as it is, it contains three screen-grid tubes, a power pentode, and a dynamic reproducer, all with their power supply. How this result is obtained is shown



The chassis of the set shown above has screen-grid (two) R.F. and detector, feeding a power pentode.

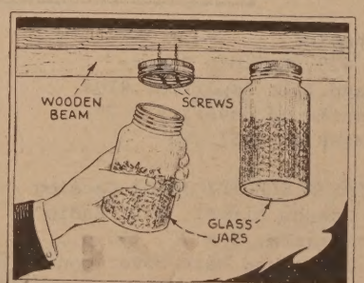
in the interior view; the maximum baffling possibilities are realized by the central disposition of the speaker cone. Three tuned circuits, giving good selectivity, are controlled by the tuning knob at the right; the only other control—that for volume—is combined with the switch. The design is attractive by its simplicity, which seems to be almost the ultimate.

(*United American Bosch Corp., Springfield, Mass.*)

RAFTERS, BOLTS AND NUTS

By John Hardt

THE idea I am about to describe has served me lots of times and I am sure it will be of interest to many others. It is illustrated below.



This is a space-saving idea; but be sure to screw the jar up tight.

Every mechanic has his choice collection of bolts, nuts and washers; which often are carefully filed in lettered boxes, or in cans, but still more often, are not filed at all! But how handy it is for anyone to reach overhead, unscrew a glass bottle from its threaded cap, select the desired part, and replace the bottle by a turn of the wrist.

This arrangement is the result of fastening the metal cover to an overhead rafter by means of a couple of screws. A number of these present a neat appearance, and are very handy. (If the rafters are low, "watch your head!")

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COMPARE the Model 19 with *any* tube checker—you need the features listed below in the instrument you purchase. Try the SUPREME Model 19 and you will have no other.

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Full 3½" D'Arsonval Type Meter

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"Satisfaction is Guaranteed." In brief, if after investing in a SUPREME Model 19 Tube Checker you do not feel that you have obtained the maximum value in this type of instrument—if it fails to prove "Supreme by Comparison," return it within 10 days from receipt thereof, transportation charges prepaid, and GET YOUR MONEY BACK. We make this offer based on our confidence in *Your* judgment and the quality of *Our* product. Mail the order blank below at once—*You can't lose.*

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☐ Counter Type, Dealers Net Price, F.O.B. Greenwood, Miss. $26.95

☐ Portable Type, Dealers Net Price, F.O.B. Greenwood, Miss. $29.95

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1931 ads

AIR-KING
Superheterodyne S.W. Converter

The greatest converter ever built.

Brings in European stations clear as a bell. Converts any set into a short wave receiver. Employs 3-227 tubes; covers from 20 to 115 meters. Coil switch covers all wave lengths. Single dial control, no body capacity, no squeals. Has built-in filament transformer to heat the 3-227's. All you need from your receiver is a positive B. voltage from 15 to 180 volts. Voltage is not critical; no molestation of the receiver. Size 7x10x5 in. Weight 8 lbs.

OUR PRICE
$14.70

CROSLEY Type F Dynacone Speaker

This Crosley Speaker is meeting the increasing demand for an automobile radio reproducer which can be expected to give a full measure of satisfaction. Dynamic Tone!

OUR PRICE
$2.95
Net

1931 ads

R. C. A. Loudspeaker 103

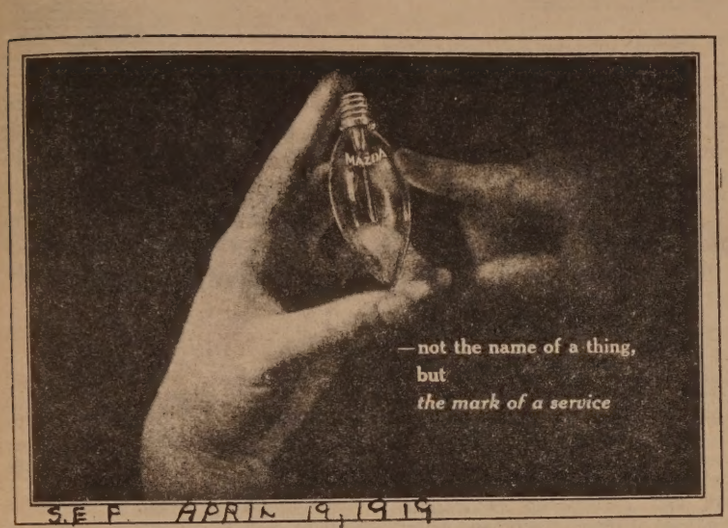
A beautiful speaker, superb in its faithful reproduction. Molded frame and pedestal resemble hand carved oak. Mechanism concealed by attractive tapestry.

(Genuine R.C.A.)
List $18.00
OUR PRICE **$4.25**

Kolster K-6 Speaker

Magnetic type cone speaker. Remarkable tone quality; volume to spare. Beautifully carved, fine Walnut cabinet. Equipped with highly sensitive oversize magnet and driving unit. Faithful reproduction from the faintest whisper to fullest volume of a brass band.

List $20.00
OUR PRICE **$3.95**



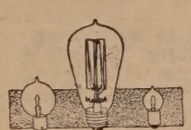
S.E.P. APRIL 19, 1919

MAZDA

"Not the name of a thing, but the mark of a service"

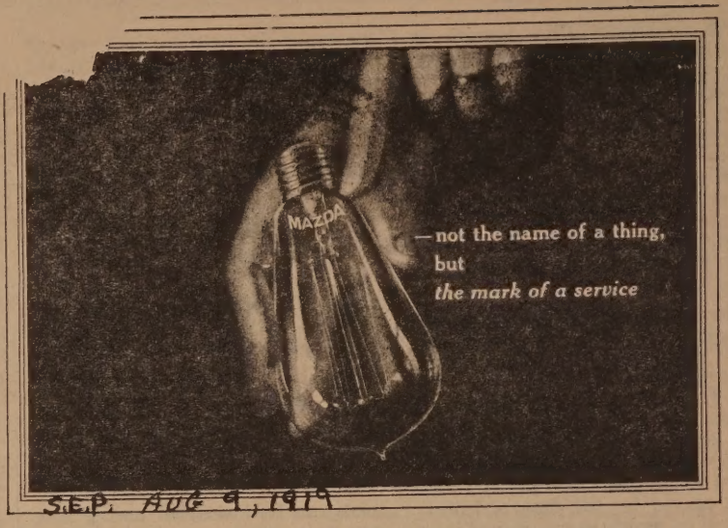
MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this service.

MAZDA Service is centered in the Research Laboratories of the General Electric Company at Schenectady, N.Y. The mark MAZDA can appear only on lamps which meet the standards of MAZDA service. It is thus an assurance of quality. This trademark is the property of the General Electric Company. 4645



A MAZDA Lamp for every purpose

RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY



S.E.P. AUG 9, 1919

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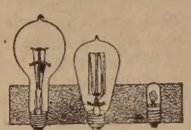
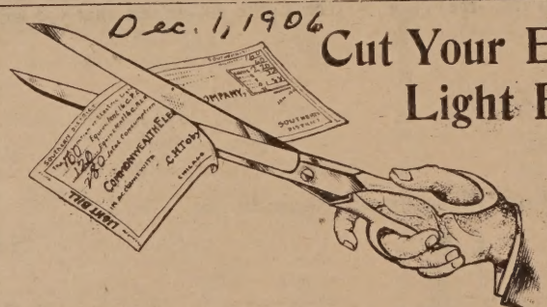


A MAZDA Lamp for every purpose

RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY

Dec. 1, 1906

Cut Your Electric Light Bill



If that statement interests you read on,—That's just exactly what you can do, and besides that you can multiply your comfort many times by heeding this announcement. We bring to your consideration an electric light bulb that will fit any electric fixtures in your home or office by just screwing it in place of any bulb now in the fixture, that will turn high or low, one candle power to sixteen candle power. Where you now turn off the light altogether, you merely turn this down and so avoid all stumbling in the dark on your return.

Do you realize when you snap on a cluster of lights to get a book in the library you burn up enough electricity in *ten minutes* to run a "turn down" lamp *ten hours?* But surely, we have said enough to interest you in the

HYLO

(High-Low)

It is the lamp that marks the home of the elegant, but *careful* housewife—the office of the up-to-date *prudent* business man.

Elegance, comfort and economy in lighting cannot be secured without the **HYLO**. We can give you many pointers in our complete descriptive matter and price list of convenient lighting. A Booklet—How to read your meter—containing valuable information, sent free upon request.

SOLD MONEY BACK PLAN

Electricians everywhere sell the genuine **HYLO** on trial. If your electrician will not, send your name and his to us and we will either refer you to a man who will sell you on trial, or arrange to supply your wants direct.

CAUTION: The **HYLO** is the first successful turn down electric bulb. See that the name "**HYLO**" is inside the glass bulb, so you will be sure the dealer has made no mistake and it will turn up and down when you get it home. Get the lamp you call for.

THE PHELPS CO., 52 State Street, Detroit, Mich., U. S. A.

Music for the Dance—All Kinds of Fun

THE Edison Phonograph is loud enough to play at any dance held in house, barn or hall.

It doesn't make any difference how many are dancing or how much shuffling of feet there is over the floor—the Edison can be heard above all of the noise.

The dreamy waltzes and the crashing two-steps carry you along with irresistible force. Edison Phonograph music is better than any other kind of music to dance by.

The Edison Phonograph takes the place of any orchestra. Certainly you would rather dance to the music of a Sousa two-step than to the halting, uncertain strains of some orchestra you have heard—or perhaps some orchestra that has played at a dance which you have attended.

You would prefer a perfectly timed waltz played by the famous Edison stringed orchestra to one played by a piano out of tune and a violin that scraped.

You can start a dance at a moment's notice in your own home. "Let's have a dance" is all that is necessary. Up come the rugs, the Edison is placed in one end of the room and in a moment a waltz is humming out of the horn and light feet are tripping over the floor.

The Edison Phonograph is a wonderful fun maker morning, noon and night. There can be little cheerlessness in a home that has an Edison.

If you get up feeling "cranky" and out of sorts there is no better remedy than a rollicking Edison tune. It makes your blood tingle. It puts you on your feet for the remainder of the day and starts you off right.

Eat your lunch to the accompaniment of the Edison. Let it play for you throughout the entire afternoon. It may be kept in the house, it may be placed on the porch. It may be carried out of doors and put down on the lawn.

When on the lawn its magnificent tones can be heard for a long, long way on a still summer night and, in the day time, as you sit under the shade of the trees, the sweet songs the Edison sings carry you to scenes thousands of miles away.

Summer or winter, this great instrument gathers its hearers about it and holds them spellbound. Whether it plays and sings out on the porch under a soft summer moon, or whether it furnishes joyful music while you are eating apples and drinking cider around the roaring fireplace or red hot winter stove, it is always the reliable, the perfect Edison and the premier fun-maker.

A lawn party becomes many times more enjoyable if there is an Edison Phonograph on the lawn. There is nothing that makes a prettier scene—the green grass, the shimmering white dresses, the laughter, the tea or the ice cream or what not and—the Edison. The Phonograph gives you music there on your lawn that you couldn't buy at any one show in any great city because it is the kind of music that one show couldn't afford to give you for the price of one admission. The greatest operatic stars sing for you and the most renowned musicians play for you.

The Edison at picnics increases the pleasure five fold. Swinging in the hammocks stretched to the trees that fringe the little lake or river one enjoys the Edison perfectly. It furnishes music for the children to dance and sing by, and it gives the kind of music that the older ones delight in hearing. The Edison is the unparalleled entertainer for the picnic.

It may be carried to the picnic grounds with the greatest ease, it takes no time to set it going when once it is there, and it keeps up its delicious melody all of the afternoon and as far into the night as you may want to remain.

Then there are so many other ways to have fun with an Edison. Have you ever heard your own voice coming from some one else? Of course not. More than likely you have attempted to get some idea of what your voice sounded like by shouting out some place where the echoes go round and round. With an Edison in the home anyone can hear an exact reproduction of his own voice. With each Home and Triumph Machine is furnished, both a reproducer and a recorder. Put the recorder on the instrument, slip in a blank record, and talk into the horn. A recorder will also be included with the Gem and Standard Machines at an additional price of $3.00, if specially ordered.

Then change the recorder to the reproducer and listen. From the depths of the horn will come your own words and your own voice with such a pure distinctness that you will

be startled. You may sing or talk or laugh or whistle or even whisper into that horn and when you put on the reproducer your words, your song, or your whispered sentence will come back to you in the very same way that it went in. You will thus have your own voice forever and in after years—perhaps a hundred years from now some one will say: "that is the voice of my grandfather."

Baby's cry or prattle or crooning may be caught by the Edison, and in after years, when baby is a grown up man or woman, those records will be so valuable that thousands of dollars would not buy them. The voice of the wife or husband, the voice of the grandparents or children, all may be caught with the same distinctness.

There is something strangely supernatural about hearing your own voice as if coming from some one else. Perhaps YOU think you know how your own voice sounds. Perhaps you know how it sounds when you sing. But no one will be more surprised than yourself when you REALLY HEAR YOUR OWN VOICE coming from that other person —THE EDISON PHONOGRAPH.

BACK ISSUES

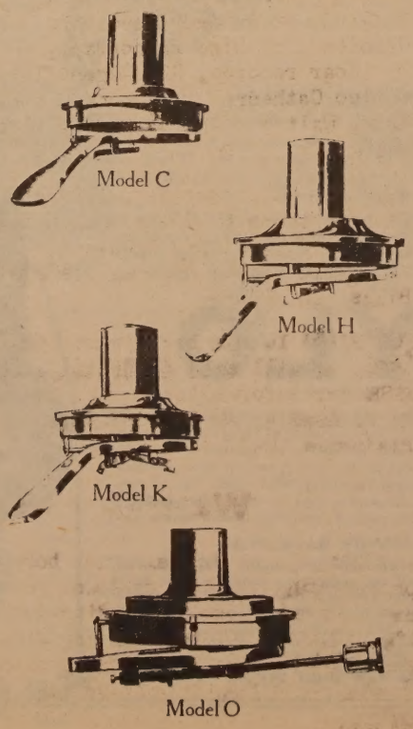
The Horn Speaker

All 10 back issues for 1973...$8.00
Single issues...$1.00 each
All 10 back issues for 1974...$6.00
Single issues...$.75 each
All 10 back issues for 1975...$5.00
Single issues...$.75 each
All 10 back issues for 1976...$5.00
Single issue...$.75 each
Any single issue of 1977...$.75 each
Later, we should have complete volumes for 1972, first year.

The Horn Speaker
Box 12 Kleberg, Texas 75145

Rates for THE HORN SPEAKER
One year.....$5.50
Two years.....9.00
Special rates for one year (mailed in envelope)
First class.....$8.50
Air mail.....$12.00
Foreign air mail...16.00
Mail address: THE HORN SPEAKER
Box 12
Kleberg TX 75145

Edison Phonograph Reproducers



MART

Classified ad rate: 6¢ per word.
Photo ads: $2.00 extra.

Deadline: 20th of the preceding month.

MISC.

"RADIO AGE," a radio magazine devoted to wireless and early broadcast eras. Contains interesting articles written by collectors, articles published in early radio magazines, lots of reprints of famous radio ads, and a classified section for buying or selling radio and electronic items. Subscribe at $7.50 per year for ten issues. Mail check or money order to Radio Age, 1220 Meigs Street, Augusta GA 30904.

FOR SALE OR TRADE

HAVE ANTIQUE RADIO & TV TUBES. Also some antique & old radios. Send 26¢ stamps for list w/prices. Harold's Radio, 3106 N. 3rd St., Harrisburg PA 17110.

FOR SALE OR TRADE

Olde Tyme Radio Parts for Sale;

Power Transformer $10.00
Pri: 117VAC
Sec 1: 700VCT @ 70ma
2: 5VAC @ 2A
3: 6.3VAC @ 2.5A

Filament Transformer $5.00
Pri: 117VAC
Sec: 2.5VAC @ 10A

Replacement Interstage Transformer $2.00
Ratio: 3:1

CAPACITORS (paper) 25¢ ea.
.15uf -400V
.05uf -600V
.022 -600V
.01 -600V
.006 -1600V

Old Battery Radio Type Capacitors (flat molded type) 50¢ ea.

Electrolytic Capacitors
2uf @ 150V under , 50¢
40 - 80uf @ 150V chassis $1.00
12-12 uf @ 450V mount 1.50
8 - 8uf @ 450V (screw mount) $3.50

Manual
Rider - Vol. 1 to V abridged volume $25.00

Resistors (all values) each.
1/2W 10¢
1W 15¢
2W 20¢

Tuning Dial Belts $2.00
Send radio model No. and old belt or belt demensions.

Order from: Olde Tyme Radio Co.
2445 Lyttonsville Rd.
Silver Spring MD
20910.

All items are priced as listed plus shipping.

EARLY BATTERY SET SERVICE MANUAL 1919-1927, bound 200 page special edition of Riders volume 1, covers all battery sets, $17.50. New WD11A $9.50 each, $18. pair.
MORE THAN YOU WANT TO KNOW ABOUT THE RADIOLA III, 30 pages $5.00.
RADIOLA BATTERY SET SERVICE MANUAL 1922-1927, covers all radio battery sets, 85 pictures and diagrams $5.00.
Ken Hanson, 3403 Broadway, Long Beach CA 90803.

VICTOR talking machine sign, heavy enameled 5 color sign showing Victor dog looking into horn of record player. Bottom of signs reads, parts & service. Measures 12 in. square on one eighth in. steel. Weighs 4 lbs. Also Columbia gramaphone sign with 3 colors showing horn record player & leaders in quality in script letters limited quanity. Choice of signs $17.50 shipping included. Signs, 1308 Hewitt, Everett, Wash. 98201

TRADE: Radiola type AR three stage R.F. amplifier, it is the companion piece to the RADA unit. I'm only interested in real old gear, let me know what you have to trade.
Joe Horvath, 522-Third St., San Rafael CA 94901.

FOR SALE OR TRADE

RIDERS RADIO MASTER INDEXES: Vols. 1 to 15 $12.50, Vols. 1 to 23 $15.00, Vols. 1 to 20 $14.00.
EARLY RIDERS Vol. 1. 1919-1927 covers all battery sets, 200 pages, $17.50.
RADIOLA BATTERY SET SERVICE MANUAL 1922-1927 covers all battery sets 85 pictures & diagrams $5.00.
RIDERS Vol. 1 in 16 parts $5.00 each, 50 to 70 pages each, order by manufacturer parts 2 and 11 covers AK & RCA other parts cover 2 or more manufacturers. Send SASE to K. Hanson, 3403 Broadway, Long Beach CA 90803.

BLANK BAKELITE PANELS - Cut to size 1/16" to 3/8" thick. Fabricating and engraving services available. SASE for pricing sheet.
Parsons, WB1BVO, 22 Forest St., Branford CT 06405.

NICKEL PLATED brass machine screws etc. for old radios. Crosley thumb screws, AK & FE thumb nuts. SASE for list. Want useable parts from the 20's. Ray Harland, 2602 Mary Lane, Escondido CA 92025.

FOR SALE: Radios, tubes, speakers, parts, service manuals. List R-1-78, Long SASE & 30¢. Krantz, 100 Osage Ave., Somerdale N.J. 08083.

RIDERS MANUALS: Radio #4 - 17 $90. for set only; TV #6 - 27 (10 only, some missing) - $7. each.
Rosenthal, 507 S. Maryland Ave., Wilm. DE 19804.

FOR SALE: Hard to get radio tubes for restoring that antique radio. No lists - state needs.
Leo Gibbs, 701 Brookfield Rd. Kettering OH 45429.
Phone; 513 299 3965.

SELL or TRADE for early Grebe, Federal, or Kennedy receivers: Outside Horn Disc Phonograph, Cylinder records, RCA Regenoflex, Philco Cathedral, 01A tubes, etc. SASE, Walt Sanders, 15 Todd, Terre Haute IN 47803.

UV99 and WD11 adaptors. Use any UX base tubes $5.50 ea. pp U.S.A. 2 for $10.00 either type.
K. Parry, 17557 Horace, Granada Hills CA 91344.

FOR SALE: 10 old battery radios for $500. or will sell seperately. Send SASE for information.
E. P. Remski, 90 Orchard St., Plainview N.Y. 11803.

WANTED

WANTED: Large lot external horn phonographs, parts, cylinder records, crystal sets, battery radios factory mfg., before 1926. Will pay $75. for mint Lambert Jr. Crystal set.
Young, 11 Willow Court, Totowa N.J. 07512.

WANTED

WANTED: Circa 1928-32 Television: Pioneer television scanner, I.C.A. Visionette, The Western Televisor, "See All" Television Receiver and scanner kit, scanning discs, Daven television amplifiers, Raytheon Kino Lamps. Any and all information welcomed. Darcy Brownrigg, Chelsea, Quebec, JOX 1NO CANADA.

WANTED: CIRCA 1930-31 TV scanning discs, Daven video amplifier, Kino lamps, complete and Dartial kits. Also all manner advertising material on receivers by Jenkins, Baird, others. Darcy Brownrigg, Chelsea, Quebec JOX 1NO CANADA

WANTED: Knobs dial plates and reostats for Westinghouse model DA dectector amplifier. Will to pay maximum or trade. Write Olde Tyme Radio Co., 2445 Lyttonsville Rd., Silver Spring MD 20910.

WANTED: Two HALLICRAFTERS SPEAKER CABINETS - with or without speakers. Preferably for SX-28 and SX-100.
Eric Staehling, Box 246, Apple Valley CA 92307. Phone 714 242-3411.

WANTED: National SW-3 complete with power supply and coils. Must be mint. WB1BVO, Norman A. Parsons, 22 Forest St., Branford CT 06405.

WANTED: WIRE RECORDERS: Brush, Armour, Telegraphone, or odd ball types. H. Layer, AV-SFSU, 1600 Holloway, San Francisco CA 94132.

WANTED: Cover for Crosley metal Band box (7½" X 17") and cabinet for Frees Eisemann NR45 (Approx. 28" X 9" X 8" deep). Rosenthal, 507 S. Maryland Ave., Wilm. DE 19804.

WANTED: RCA sales literature for radios, phonos, TV's any year. Publications of RCA and CBS on early color TV. Information on pre-1946 RCA TV cameras. Charleton Sarver, 256 W. 88th St., New York, NY 10024.

WANTED: Specialize in Kellogg 401 tube radios and other unusual early AC sets. Top prices paid.
Rosenthal, 507 S. Maryland Ave., Wilm. DE 19804.

WANTED: "Radio News" 1920 to 1928. Polit Audio 390 or 391.
W3BNO, 2706 Cub Hill Rd., Baltimore MD 21234.

WANTED: Early color television receivers, documentation and phonographs for a written history.
Especially CBS color wheel and early RCA/NTSC 15", 19" and 21".
Ed Reitan, 464 Midvale Ave., Los Angeles CA 90024.
Phone (213) 478 7393.

WANTED: 3 DeForest type plug in honeycomb coils, with or without mount. Broadcast band preferred.
Jim Pollard, 4107 Loma Alta Dr., San Diego CA 92115.

PUETT ELECTRONICS PUETT ELECTRONICS PUETT ELECTRONICS PUETT ELECTRONICS PUETT ELECTRONICS

PUETT ELECTRONICS

P.O. BOX 28572 DALLAS TEXAS 75228

PUBLISHERS OF

THE CLASSIC RADIO NEWSLETTER

(send 13¢ stamp for newsletter sample)

LIST NO. 16A

SCHEMATIC DIAGRAMS
WE CAN FURNISH SCHEMATICS ON ANY RADIO (1920 to 1954) - $1.50 postpaid. IF YOU CAN NOT FURNISH THE NAME OF THE MANUFACTURER AND THE MODEL NUMBER, SEND THE TYPES AND QUANTITY OF TUBES AND WE WILL RESEARCH OUR FILES FOR A SIMILAR SET WHICH USES THE SAME TUBES - RESEARCH $3.00 postpaid.

NEW ACQUISITIONS LIST
01A, 99, WD-11, etc. when in stock, ANTIQUE RADIO SETS AND TEST GEAR, ANTIQUE RADIO BOOKS, AND OTHER "one at a time" items-- list sent by first class mail four to six times a year by subscription -- $2.00 per year.

BALLAST TUBES send for catalog.

THE PUETT ELECTRONICS SUPER ANTENNA - GROUND SYSTEM plans $2.

PUETT ELECTRONICS **LISTS - BOOKS & BOOKLETS** (postpaid)
(1) THE ACQUISITION OF ANTIQUE RADIOS by J. W. F. Puett $2.00
(2) THE COMPLETE RESTORATION OF BATTERY POWERED ANTIQUE RADIOS by J. W. F. Puett $2.00
(3) THE COMPLETE RESTORATION OF AC POWERED ANTIQUE RADIOS by J. W. F. Puett $2.00
(4) COMPLETE LIST OF ANTIQUE RADIO SERVICES $2.00 (new list)
(5) WHEN WAS THAT OLD TUBE MADE? by James R. Wilkins $2.00
(6) SILVER GHOSTS by J. W. F. Puett - classic sets by E. H. Scott $10.00
(7) MILITARY TUBE TYPE (VT) TO COMMERCIAL TUBE TYPE CROSS-REFERENCE LIST $1.00

HOW TO ORDER

(1) Make checks and money orders payable to PUETT ELECTRONICS.
(2) WE SHIP PARCEL POST. NO C.O.D. INCLUDE 15% FOR POSTAGE & HANDLING. POSTAL INSURANCE RATES ARE 60¢ FOR ORDERS UP TO FIFTY DOLLARS. MINIMUM ORDER $3.00 - DOES NOT APPLY TO SCHEMATIC DIAGRAMS OR BOOKLETS. ORDERS WHICH EXCEED $50.00 ARE SHIPPED POSTPAID. TEXAS RESIDENTS ADD 5% STATE SALES TAX.

POLICY

CUSTOMER SATISFACTION GUARANTEED. If you are not satisfied with your order for any reason, tubes may be returned within ten days for refund or replacement with exception of tubes which are shorted or have open filaments. It will be assumed that returned tubes with open filaments or shorts were damaged in shipment. Shipping damage claims will be handled promptly through the post office on insured orders. PUETT ELECTRONICS assumes no liability for orders which are not insured, and no liability beyond that which is covered by postal insurance. The tubes listed herein are either new, military pull-outs, factory over-purchases, or used. If only new tubes in original cartons are acceptable, add 10% to the total cost of your tube order. REFUNDS are mailed with your invoice for out-of-stock merchandice. ALL TUBES ARE THOROUGHLY TESTED ON A MUTUAL CONDUCTANCE TUBE CHECKER BEFORE SHIPMENT. ALL TUBES MUST MEET NEW TUBE STANDARDS WHEN CHECKED. All prices are subject to change without notice. All tube prices listed herein supersede prices in previous lists and ads. We offer free technical advice for a 13¢ stamp or you may call J. W. F. Puett at 214-279-8309 NO LATER THAN 10:00 PM CENTRAL STANDARD TIME - PLEASE.

ANTIQUE RADIO TUBES

PUETT ELECTRONICS HAS HUNDREDS OF OTHER TUBE TYPES NOT LISTED HEREIN, FOR OTHER TUBE TYPES, SEND 65¢ FOR CATALOG.

0D3	$2	1G4	$4	1T5	$3	6R7	$4	7B5	$3	12K7	$4	25AC5	$3	50C6	$4	117N7	$7
0Z4	$3	1G5	$4	1U4	$3			7B6	$4	12K8	$4	25B6	$3	50L6	$3	117P7	$7
1A1	$5	1G6	$4	1U5	$3			7B7	$4	12L6	$2	25C6	$2	50X6	$4	117Z3	$3
1A3	$4	1H4	$5	1V	$5			7B8	$4	12Q7	$4	25L6	$3	50Y7	$4		
1A4	$4	1H6	$4	2A3	$7			7C5	$3	12S8	$3	25S	$4	51	$4	117Z4	$4
1A5	$4	1J6	$4	2A4	$5			7C6	$4	12SA7	$3	25Z5	$3	55	$5	117Z6	$4
1A6	$3	1L6	$8	2A5	$4	6S4	$4	7C7	$4	12SC7	$3	25Z6	$3	56	$3	485	$5
1A7	$3	1LA4	$4	2A6	$4	6S8	$4	7E6	$4	12SF5	$3	26	$6	57	$4	884	$7
1B4	$4	1LA6	$4	2A7	$5	6SA7	$3	7E7	$4	12SF7	$3	26A6	$4	58	$4	950	$5
1B5	$4	1LB4	$4	2B7	$4	6SB7	$3	7F8	$4	12SG7	$3	26A7	$4	59	$6	951	$5
1B7	$4	1LC5	$5	2E5	$5	6SC7	$3	7G7	$4	12SH7	$3	27	$4	70A7	$3	955	$4
1B8	$4	1LC6	$4	2K2	$3	6SD7	$3	7H7	$4	12SJ7	$3	28D7	$3	70L7	$5	958	$4
1C1	$4	1LD5	$4	3A5	$3	6SF5	$3	7J7	$4	12SK7	$3	30	$5	71A	$7	1201	$4
1C5	$3	1LE3	$4	3A8	$4	6SF7	$3	7L7	$4	12SL7	$3	31	$4	75	$4	1203	$4
1C6	$3	1LF3	$4	3C6	$4	6SG7	$4	7Q7	$4	12SN7	$3	32	$4	76	$3	1232	$4
1C7	$5	1LG5	$4	3LF4	$5	6SH7	$3	7R7	$4	12SQ7	$3	33	$4	77	$4	1273	$4
1D5	$5	1LH4	$4	3Q5	$3	6SJ7	$3	7S7	$4	12SR7	$3	34	$4	78	$4	1852	$3
1D7	$5	1LN5	$4	3V4	$3	6SK7	$3	7V7	$4	12V6	$3	35	$4	79	$4	1853	$3
1E5	$5	1N5	$4	5AZ4	$5	6SL7	$3	7W7	$4	12X4	$2	35A5	$4	80	$3	9002	$3
1E7	$4	1N6	$4	5R4	$2	6SN7	$2	7X6	$4	12Z3	$2	35B5	$2	81	$6	9003	$3
1F4	$4	1P5	$4	5T4	$2	6SQ7	$3	7X7	$4	14A4	$4	35C5	$2	82	$3	9004	$4
1F5	$4	1Q5	$4	5U4	$2	6SR7	$3	7Y4	$4	14A5	$4	35L6	$3	83	$3	VR-90	$2
1F6	$4	1R5	$2	5V4	$2	6SS7	$3	7Z4	$3	14A7	$4	35W4	$2	83V	$3	VR-105	$2
1F7	$5	1S5	$2	5W4	$2	6ST7	$3	10	$7	14B5	$3	35Y4	$4	84	$3	VR-150	$2
		1T4	$3	5X4	$3	6SU7	$3	12A5	$4	14B6	$4	35Z3	$4	85	$4	VT-52	$5
				5Y3	$3	6SV7	$3	12A6	$4	14B8	$4	35Z4	$4			FM1000	$4
				5Z3	$3	6T7	$4	12A7	$4	14C5	$3	35Z5	$3	89	$4	XXB	$4
				5Z4	$3	6U5	$5	12A8	$4	14C7	$4	35Z6	$4	117L7	$5	XXL	$4
				6A3	$5	6U7	$5	12AH7	$3	14E6	$4	36	$4	117M7	$5	XXFM	$4
				6A4	$6	6V6	$2	12AT6	$2	14E7	$4	37	$4				
				6A5	$4	6V7	$4	12AT7	$2	14F7	$4	38	$3				
				6A6	$4	6X4	$2	12AU6	$2	14F8	$4	39	$3				
				6A8	$4	6X5	$2	12AU7	$2	14H7	$4	40	$7				
				6AB4	$3	6Y5	$3	12AV6	$2	14J7	$4	41	$4				
				6AB7	$3	6Z4	$3	12AX7	$2	14N7	$4	42	$4				
				6AC5	$3	6Z5	$3	12B7	$4	14Q7	$4	43	$4				
				6AC7	$3	6Z7	$2	12B8	$4	14R7	$4	44	$3				
				6AK5	$2	6ZY5	$3	12BA6	$2	14W7	$4	45	$6				
				6AL5	$3	7A4	$4	12BE6	$2	14X7	$4	47	$7				
				6AL7	$5	7A5	$3	12C5	$3	15	$7	48	$4				
				6AQ5	$2	7A6	$4	12C8	$4	19	$4	49	$4				
				6AV6	$2	7A7	$4	12F5	$3	22	$7	50	$7				
				6AX5	$2	7A8	$4	12H6	$3	24A	$5	50A5	$3				
				6BA6	$2	7AE7	$4	12J5	$3	25A6	$3	50B5	$2				
				6BE6	$3	7AG7	$4	12J7	$4	25A7	$3	50C5	$2				
				6BJ6	$2	7B4	$4										
				6C4	$2	6Q7	$4										
						6C5	$3										
						6C6	$4										
						6C7	$4										
						6C8	$4										
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						6N7	$4										
						6P5	$3										
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